

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (Currently amended):** A simulation method of analyzing
2 electromagnetic interference developing in an LSI, comprising:
3 a correction step of correcting the amplitude of a current estimation waveform in
4 each simulated node which has been previously prepared for each change in each
5 simulated node, in accordance with the probability of variation in each simulated node;
6 an addition step of adding current waveforms of all simulated nodes together
7 within a period of time corresponding to one cycle, provided that the thus-corrected
8 current waveform appears at time a signal arrives at each simulated node; and
9 a frequency analysis step of analyzing the frequency of the current waveform
10 calculated in the addition step.

1 **Claim 2 (Currently amended):** The method of analyzing electromagnetic
2 interference developing in an LSI according to claim 1, wherein the correction step
3 includes a step of correcting the amplitude of a current estimation waveform, which has
4 been prepared for each change in each simulated node, in accordance with the probability
5 of variation in each simulated node and a distribution with respect to time.

1 **Claim 3 (Currently amended):** The method of analyzing electromagnetic
2 interference developing in an LSI according to claim 1, wherein each simulated node has

3 a plurality of signal transmission paths (hereinafter referred to simply as "paths"), and
4 each of the current waveforms is calculated in consideration of a case where each of the
5 paths has a unique probability of change and signal arrival time.

1 **Claim 4 (Currently amended):** The method of analyzing electromagnetic
2 interference developing in an LSI according to claim 2, wherein each simulated node has
3 a plurality of paths, and each of the current waveform is calculated in consideration of a
4 case where each of the paths has a unique probability of change and signal arrival time.

1 **Claim 5 (Currently amended):** A method of analyzing electromagnetic
2 interference developing in an LSI, the method comprising:

3 a waveform formation step of forming a current estimation waveform which has
4 been prepared for each change in each simulated node, as if the waveform randomly arises
5 within a plurality of predetermined cycles, in accordance with the probability of change in
6 each simulated node and a time at which a signal arrives at each simulated node;

7 adding the thus-prepared current estimation waveforms of all simulated nodes, to
8 thereby derive a current waveform; and

9 analyzing the frequency of the current waveform, thereby determining a noise
10 characteristic of EMI.

1 **Claim 6 (Currently amended):** The method of analyzing electromagnetic
2 interference developing in an LSI according to claim 5, wherein each simulated node has

3 a plurality of paths, and a current waveform is calculated in consideration of a case where
4 each of the paths has a unique probability of change and signal arrival time.

1 **Claim 7 (Currently amended):** A method of analyzing electromagnetic
2 interference developing in an LSI, the method comprising:

3 a waveform formation step of forming a current estimation waveform which has
4 been prepared for each change in each simulated node, as if the waveform randomly arises
5 within a plurality of predetermined cycles, in accordance with the probability of change in
6 each simulated node and a distribution probability of time;

7 adding the thus-prepared current estimation waveforms of all simulated nodes, to
8 thereby derive a current waveform; and

9 analyzing the frequency of the current waveform, thereby determining a noise
10 characteristic of EMI.

1 **Claim 8 (Currently amended):** The simulation method of analyzing
2 electromagnetic interference developing in an LSI according to claim 7, wherein each
3 simulated node has a plurality of paths, and a current wave form is calculated in
4 consideration of a case where each of the paths has a unique probability of change and
5 signal arrival time.